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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,871

07/21/2006

Armin Merz

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2119

7590

07/10/2008

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1423 POWHATAN STREET, UNIT ONE

ALEXANDRIA, VA 22314

EXAMINER

COLEMAN, KEITH A

ART UNIT

PAPER NUMBER

3747

MAIL DATE

DELIVERY MODE

07/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,871	Applicant(s) MERZ ET AL.	
	Examiner KEITH COLEMAN	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/21/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Houser et al. (US Patent No. 2,301,407).

With regards to claim 9, the patent to Houser et al. discloses a high-pressure pump for a fuel injection system of an internal combustion engine (Col. 1, Lines 1-5), the pump comprising a housing (65 and 64, See Figure 2) with at least one pump element including a pump piston (43) driven into a stroke motion by a drive shaft (68); the pump piston (43) being guided so that it can slide in a cylinder bore (41) of a housing part and delimiting a pumping chamber (41) therein; a support element (71) supporting the pump piston (43) against the drive shaft (68); a prestressed return spring (See Figure 2) acting on both the pump piston (43) and the support element (71) in the direction toward the drive shaft (68), a receptacle contained in the housing part that also contains the cylinder bore (See Figure 2), the support element being guided so that it can slide in the receptacle in the direction of the longitudinal axis of the pump piston, but cannot rotate around the longitudinal axis (See Figure 2).

With regards to claim 10, the patent to Houser et al. discloses wherein the receptacle contained in the housing part adjoins the cylinder bore at the end oriented toward the drive shaft (See Figure 2).

With regards to claims 11 and 12, the patent to Houser et al. discloses wherein the receptacle is embodied in the form of at least one slot provided in the housing part (See Figure 2).

With regards to claims 13-15, the patent to Houser et al. discloses wherein the support element is embodied as at least approximately rectangular in cross section (appears to be a cross section in Figure 2).

With regards to claims 16-19, the patent to Houser et al. discloses wherein the housing part comprises an extension (70) that is at least approximately cylindrical, is oriented toward the drive shaft (68), and contains the cylinder bore and the receptacle (See Figure 2).

With regards to claims 20-23, the patent to Houser et al. discloses wherein the return spring is a helical compression spring encompassing the extension of the housing part (See Figure 2).

Art Unit: 3747

With regards to claims 24-27, the patent to Houser et al. discloses wherein the extension of the housing part comprises an annular groove that opens toward the drive shaft and divides the extension into an inner extension and an outer extension encompassing it; and wherein the return spring is embodied in the form of a helical compression spring contained in the annular groove (See Figure 2).

With regards to claim 28, the patent to Houser et al. discloses wherein the return spring is supported at least indirectly against the support element; and wherein the pump piston is coupled to the support element in the direction of its longitudinal axis (See Figure 2).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Porel (US Patent No. 6,264,437) shows the current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH COLEMAN whose telephone number is (571)270-3516. The examiner can normally be reached on 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Cronin can be reached on (571)272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3747

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KAC
/K. C./
Examiner, Art Unit 3747

/Stephen K. Cronin/
Supervisory Patent Examiner, Art Unit 3747